UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/722,923	11/27/2000	Terence Leong	SMQ-114RCE/P5635	4941

46141 7590 06/14/2006	EXAMINER
LAHIVE & COCKFIELD, LLP	LUDWIG, MATTHEW J

LAHIVE & COCKFIELD, LLP
28 STATE STREET
BOSTON, MA 02109

ART UNIT	PAPER NUMBER
2178	

DATE MAILED: 06/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application No.	Applicant(s)
Office Action Summary		09/722,923	LEONG ET AL.
		Examiner	Art Unit	
		Matthew J. Ludwig	2178	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 March 2006*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-10,12-27,29-44 and 46-59* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10,13-27,30-44 and 47-59* is/are rejected.

7)☒ Claim(s) *12,29 and 46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Amendment filed 3/24/2006.

2.   Claims 1-59 are pending in the case. Claims 1, 9, 18, 26, 35, 43, and 52, are independent

claims. Applicant cancelled claims 11, 28, and 45.

3.   Claims 1-10, 13-27, 30-44, and 47-59 remain rejected under 35 U.S.C. 103(a), as being

unpatentable over Fong et al., USPN 6,678,867 filed (7/6/2001).

Claim Rejections - 35 USC § 101

4.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

5.   **Claims 1-10, 12-27, 29-44, and 46-59 are rejected under 35 U.S.C. 101 because the**

claimed invention is directed to non-statutory subject matter. Claims 1-10, 12-27, 29-44,

and 46-59, are drawn to non-functional descriptive material. MPEP 2106.IV.B.1(a)

(Nonfunctional Descriptive Material) states:

"Descriptive material that cannot exhibit any functional interrelationship with the way in
which computing processes are performed does not constitute a statutory process, machine,
manufacture or composition of matter and should be rejected under 35 U.S.C. 101."

"Where certain types of descriptive material, such as music, art, photographs and mere
arrangements or compilations of facts or data, are merely stored so as to be read or outputted by
a computer without creating any functional interrelationship, either as part of the stored data or
as part of the computing process performed by the computer, then such descriptive material
alone does not impart functionality either to the data as so structured, or to the computer."

"For example, music is commonly sold to consumers in the form of a compact disc. In
such cases, the know compact disc acts as nothing more than a carrier for nonfunctional
descriptive material. The purely nonfunctional descriptive material cannot alone provide the
practical application for the manufacture."

MPEP 2106.IV.B.1 (Nonstatutory Subject Matter) states:

"When nonfunctional descriptive material is recorded on some computer-readable medium, it is not statutory since no requisite functionality is present to satisfy the practical application requirement".

Claim 1, 9, 18, 26, 35, 43, and 52, currently recite an instance of a first and second object and generating a first and second structured document to represent the instance of the first and second object. Also, the addition of some type of content of the first and second structured document into a database is performed. No data is presented to the user and the claim language requires no user interaction, i.e. a display, printout, ext. The representation of objects fails to provide concrete steps in producing a practical application of a running program. Consequently, the claimed invention does not require the technical or useful arts and, thus, fails to define patentable subject matter.

There is no functional relationship imparted by this data to a computing device. Therefore, the claim is drawn to non-functional descriptive material which is non-statutory per se. The fact that the claim recites a computer readable medium does not provide the utility (i.e., practical application in the technological arts) required under 35 U.S.C. 101 for the manufacture.

Finally, independent claims 9, 26, and 43, recite '*transferring each structured document to the database to maintain*'. The limitation fails to accurately and distinctly claim applicant's invention. The language seems incomplete at best. There is no functional relationship imparted by this data to a computing device. Therefore, the claim is drawn to non-functional descriptive material which is non-statutory per se. The fact that the claim recites a computer readable medium does not provide the utility (i.e., practical application in the technological arts) required under 35 U.S.C. 101 for the manufacture.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

7.   **Claims 1-10, 13-27, 30-44, and 47-59, are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Fong et al., USPN 6,678,867 filed (7/6/2001).

In reference to independent claim 1, Fong teaches:

Shows a hierarchical view of the DTD Map class object that can be stored in a file

through object oriented techniques (compare to *"requesting to store an instance of an object*

implemented in a first programming language into a database"). See column 12, lines 14-26.

Because the limitation fails to provide any further description of who made the request, the

techniques used in Fong suggests a request being made to store objects within a file.

Figure 5 illustrates a data flow diagram showing the flow of data through the SGML to

HTML mapping and transformation. The reference utilizes DTD in the representation of objects

in the database. Each HTML attribute list is delimited by an HTML Attribute list Begin at the

beginning and an HTML attribute list end (compare to *"providing at least one structured*

document representing the instance of the object including attributes and attribute values

defined for a class"). See column 12, lines 32-67.

The user is allowed to create a new map or edit an already existing map. If the user

selects the Edit button from the system allows the user to interact with the system in defining a

map. If the Create Map option is selected, the user is allowed to create a new map (compare to

"adding content of the structured document representing the object into the database"). See

column 16, lines 33-67. Furthermore, the reference describes the default button, which us the

user-defined tag mapping set up by the user interaction with the SGML to JTML Map Edit

dialog box (compare to "*a plurality of structured documents representing a plurality of objects*

originally instantiated in at least two different programming languages"). See column 17, lines

20-67.

A MapCreateEditService is an object created by the MapService, in a call Create (new),

to handle the creation of a map or the modification of an existing map. The MapService passes

the HTML SymbolTable to the MapCreateEditService object from Map Service, in a call

getMapCreateEditServiceObject, so that it may create or edit a map at any time (compare to

"*sharing the at least one structured document representing the instance of the object*

implemented in a first programming language with an application written in a second

programming language"). See column 18, lines 37-67. The claim language fails to clearly

define what is being shared between the two programming languages. The reference provides a

means for mapping of a source component to plural target components. Fong accepts interactive

user input, to be processed by a map creator, for making plural changes to any of the component

mapping values the user desires until the user inputs a command. It would have been obvious to

one of ordinary skill in the art, having the teachings of Fong before him at the time the invention

was made, to modify the SGML to HTML mapping methods known in the art and taught by

Fong to share these structured documents and allow the user to interactively select options for

transformations and options for assigning attribute values for the target documents.

In reference to dependent claim 2, Fong teaches:

Figure 1A. is a declaration for an attribute list for the element. An attribute is a property

of an element that takes on different values for different instances of elements. See column 7,

lines 39-67.

In reference to dependent claim 3, Fong teaches:

The claim language fails to explicitly state what actually being done. The word 'can'

found in the limitations leaves the claim open ended. The tree structure of Figure 3B corresponds

to a generalized HTML document that results from utilizing the SGML DTD of Appendix A and

a mapping exemplified in Appendix B.

In reference to dependent claim 4, Fong teaches:

Data items and objects in software generally involve dynamic allocation of computer

storage resources at some stage in a request for execution of program code. Pointer variables,

containing addresses of data items, methods, or objects, are available to be passed among objects

during execution of code. See column 14, lines 1-45.

In reference to dependent claim 5, Fong teaches:

First, the SGML document is analyzed to determine the document type of the input

SGML document and the name of the system file where the SGML documents DTD is stored.

See column 8, lines 26-56.

In reference to dependent claim 6, Fong teaches:

The class schema is implemented in SGML, which provides a schema and DTD, which

are common to the generalized markup language as well as the extensible markup language. See

column 8, lines 8-36.

In reference to dependent claim 7, Fong teaches:

The class schema is implemented in SGML, which provides a schema and DTD, which are common to the generalized markup language as well as the extensible markup language. See column 8, lines 8-36.

In reference to dependent claim 8, Fong teaches:

The invention has been implemented using object-oriented techniques, although any programming technique and/or hardware may be used to implement the invention. For purposes of this description, a class is a description of the structure and behavior of an object, while an object is an instance of the item described by a class. See column 12, lines 15-35.

In reference to claims 9, 10, 13-27, 30-34, the claims reflect the system comprising computer instructions used for performing the methods as claimed in 1-8. In further view of the following, the claims are rejected under similar rationale.

In reference to claims 35-44, 47-59, the claims reflect the article of manufacture comprising instructions used for performing the methods as claimed in 1-9. In further view of the following, the claims are rejected under similar rationale.

Response to Arguments

8.   Applicant's arguments with respect to claims 1-59 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

9.   Claims 12, 29, and 46, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
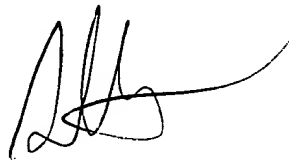
Conclusion

10.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Ludwig whose telephone number is 571-272-4127. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ML
June 6, 2006

STEPHEN HONG
PATENT EXAMINER